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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Thomas M. Laney, et al

THERMAL-DYE-TRANSFER LABEL CAPABLE OF REPRODUCING FLESH TONES

Serial No. 10/602,839

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Group Art Unit: 1734

Examiner: George R. Koch

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Carol A. Kukurudza

June 7, 2005
Date

Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Sir:

REQUEST FOR RECONSIDERATION

In response to the Office Action dated 09 May 2005, reconsideration of the claims in view of the following remarks is respectfully requested.

Claims 1-14, 19-26, 33-36 and 38-44 are rejected under 35 U.S.C. §103(a) over Weber (US 5,288,548) and Freedman (US 5,372,669). Claims 11, 12, 15-18, 27-37, 42 and 44 are rejected under 35 U.S.C. §103(a) over Weber and Freedman as applied to Claims 1 and 11 above, and further in view of Shirai (US 6,153,558), Harrison (US 5,399,218), and/or Oshima (US 6,162,517). It is noted that the Office Action sets forth an argument over claim 7 as well, though it is not in the title of the rejection. Applicants presume claim 7 was meant to be rejected under 35 U.S.C. §103(a) over Weber and Freedman in view of Shirai, Harrison, Oshima, or a combination thereof. For at least the following reasons, Applicants traverse each rejection.

The claimed invention, as set forth at least in independent claims 1, 11, and 39, is directed to a process of forming a pre-label or label receiver sheet, wherein the process includes a step of co-extruding at least

an image-receiving layer and a microvoided layer to form a cast composite film, wherein the composite film is stretched in at least one direction. The composite film comprising an image-receiving layer and a microvoided layer is coated with an adhesive adjacent the microvoided layer, and a carrier sheet is provided on the adhesive to form an integral-separable pre-label receiver sheet.

Weber discloses a label face stock having a microvoided core layer with a polymeric blend on one side, and an adhesive layer on the other side. The polymeric blend is a water-based coating applied by rod or gravure coating to the core, as disclosed at col. 4, lines 20-51. It is indicated in Weber that the polymeric blend is crucial to the improved receptivity to impact and thermal printing methods. For example, at col. 3, lines 20-27, Weber states:

> The essence of the present invention involves employing a particular polymeric blend which results in a layer having excellent receptivity to impact and thermal printing methods. The resulting surface can be printed with high speed equipment that is present in the industry, i.e., 400 lines per minute. The resulting coating has excellent ink adhesion and smear resistance both dry and in the presence of water.

Thus, the improved printing performance claimed by Weber is achieved by use of the specific, water-based, solvent coated polymeric blend forming the image-receptive layer. The Office Action asserts Weber teaches coextrusion and biaxial stretching of coextruded layers at col. 2, lines 18 and 44. However, a proper reading of the sentence at col. 2, lines 16-19, shows that the coextruded layers are forming only the core layer, not a core and an image-receiving layer. Line 44 of col. 2 is still discussing only the core layer. Weber does not disclose or suggest that the specific advantageous image-receptive layer taught at cols. 3 and 4 can be formed by extrusion, and therefore does not disclose or suggest the subject matter of Applicants' claimed invention.

Freedman is cited in combination with Weber. As discussed in Applicants' response of February 11, 2005, incorporated herein by reference, Freedman discusses facestocks and liners for use in forming pressure-sensitive adhesive stock, or labels, wherein the multi-layer co-extruded polymeric film construction including a voided layer exemplified in Fig. 1 is a liner stock, not facestock (*see* col. 2, lines 47-67). As stated at col. 6, lines 65-68, Freedman pertains to "...combining of a conventional type of facestock with a coextruded

liner." The Office Action at page 2 indicates Freedman discloses in Figure 1 a multilayer sheet that comprises "microvoided layers analogous to a polymeric image-receiving layer (layer 14)..." However, Applicants image-receiving layer is not microvoided. Further, upon reading the appropriate text of Freedman, col. 2, lines 51-52, it is apparent layer 14 is a skin layer on the core. A similar skin layer is described in Weber (col. 2, lines 40-43). The skin layer is separate and distinct from the image-receiving layer, which in Freedman is disclosed as "facestock," bearing label 32, as described with regard to Figures 3C and 4 at col. 6, lines 36, et seq. Coextruded facestock is described at cols. 10 and 11 of Freedman, but again, this is separate and distinct from the liner having the microvoided layers. Read as a whole, and as observed in Fig. 3B, Freedman describes a label of the following structure:

	Image-Receiving Layer
FACESTOCK =	Facestock Core
	Adhesive
	Skin Layer
LINER =	***Core***
	Adhesive
	Carrier

wherein the image-receiving layer and facestock core can be coextruded, and the skin layer and core of the liner can be coextruded. There are at least three layers, a facestock core, adhesive, and skin layer, between the image-receiving layer and microvoided core of Freedman. In contrast, the claimed invention has the following structure:

Image-Receiving Layer
Microvoided Core
Adhesive
Carrier

wherein the image receiving layer and microvoided core are coextruded. Freedman does not disclose or suggest any means of coextruding an image-receiving layer with a microvoided core since Freedman discloses these layers to be formed in two separate materials joined by an adhesive layer.

Combining Weber and Freedman does not result in Applicants' claimed invention. Weber teaches that the improved printing ability of the disclosed label is achieved through use of the specific image-receiving layer formulation that is a water-based, solvent coated polymeric blend. There is no

teaching or suggestion that specific polymeric blend can be extrusion coated, alone or in combination with a core layer. Freedman does not disclose or suggest coextrusion of an image-receiving layer with a microvoided core. Given the specificity of the teaching of Weber, one skilled in the art, even on reading of image-receiving layer extrusion in Freedman, would not be motivated to attempt extrusion or coextrusion of the image-receiving layer taught by Weber with the microvoided core layer because there is no indication of success. As known to one skilled in the art of polymeric coatings, extrusion is performed at very high temperatures, whereas solvent coatings are performed at low temperatures. The rheology of a coating composition suitable for rod or gravure coating is very different from that required of an extruded composition. Thus, there is no motivation to combine the teachings of Weber and Freedman.

Shirai does not overcome the deficiencies of Weber and Freedman, alone or in any combination with Harrison and Oshima, discussed below. Shirai is directed to a thermal transfer image receiving sheet for labels. As shown in Fig. 1 and described at col. 5, lines 2-4, the sheet comprises a sticker portion **2** and a release sheet portion **3**. The sticker portion **2** includes a receptor layer **4**, an optional intermediate layer **5**, and a substrate **6**, wherein the substrate layer can be foamed, but it is not disclosed or suggested that the substrate can be voided or that either the substrate or the receptor layer can be extruded. *See* col. 9, line 10 - col. 10, line 20.

Harrison does not overcome the deficiencies of Weber and Freedman, alone or in combination with any one or more of Shirai and Oshima (discussed below). Harrison discloses a thermal receiver comprising a coextruded dye image-receiving layer and thermoplastic resin with void initiating particles laminated to a support. There is no disclosure or suggestion of coating the coextruded layers with an adhesive or forming a peelable adhesive label. Further, as discussed with regard to the combination of Weber and Freedman, there is no indication that a water-based solvent coated mixture as disclosed in Weber could be successfully extruded.

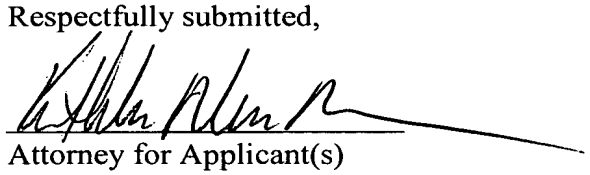
Oshima does not overcome the deficiencies of Weber and Freedman, alone or in combination with any one or more of Shirai and Harrison. Oshima is directed to an image receiving sheet for thermal transfer printing having an adhesive sheet portion and a release sheet. The adhesive sheet portion

can include a foamed layer (col. 4, lines 55-61), but does not teach or disclose a microvoided layer. There is no teaching or suggestion that either the foamed layer or the dye-receiving layer (col. 7, lines 15-23) can be extruded.

For at least the above reasons, reconsideration and withdrawal of each rejection under 35 U.S.C. §103(a) are in order, and are respectfully requested.

Applicants submit all of Claims 1-44 are in condition for allowance. Prompt and favorable action are respectfully requested. Should the Examiner require anything further, or have any questions, the Examiner is asked to contact Applicants' undersigned representative.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 40,101

Kathleen Neuner Manne/cak
Rochester, NY 14650
Telephone: 585-722-9225
Facsimile: 585-477-1148

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.